

**REMARKS**

The Applicant respectfully requests further examination and reconsideration in view of the amendments above and the arguments set forth fully below. Claims 1-49 were previously pending in this application. Within the Office Action, claims 1-49 have been rejected. By the above amendments, claims 1, 14, 27, 37, 41, 42, 43, and 47 have been amended. Accordingly, claims 1-49 are currently pending.

**Double Patenting**

Within the Office Action, claims 1-40 and 42 have been provisionally rejected under 35 U.S.C. § 101 as claiming the same invention as that of claims 1-96 of co-pending Application No. 09/801,138.

Specifically, it is stated that claims 1, 37, and 42 of the present application conflict with claims 1, 2, 49, 50, 73, and 74 of Application No. 09/801,138. In the Applicant's Response to the current Office Action related to Application No. 09/801,138, claims 2, 50, and 74 are canceled. As such, the independent claims 1, 49, and 73 of Application No. 09/801,138 are each directed to a search module including three different search capabilities. In contrast, the present independent claims 1, 37, and 42 are each directed to a search module including four different search capabilities.

Similarly, it is stated that claim 14 of the present application conflicts with claims 25-26 of Application No. 09/801,138, and that claim 27 of the present application conflicts with claims 15, 16, 39, 40, 63, 64, 87, and 88 Application No. 09/801,138. In the Applicant's Response to the current Office Action related to Application No. 09/801,138, claims 16, 26, 40, 64, and 88 are canceled. As such, the independent claims 15, 25, 39, 63, and 87 of Application No. 09/801,138 are each directed to a search module including three different search capabilities. In contrast, the present independent claims 14 and 27 are each directed to a search module including four different search capabilities.

Therefore, the independent claims within the present application and the independent claims within the Application No. 09/801,138 are not directed to the same invention.

Within the Office Action, claims 41 and 43-49 have been provisionally rejected under 35 U.S.C. § 101 as claiming the same invention as that of claims 1-42 of co-pending Application No. 09/799,032.

Specifically, it is stated that claims 41, and 43-49 of the present application conflict with claims 1-4, 12-15, 23-25, and 34-37 of Application No. 09/799,032. Present claim 41 includes a

search module, wherein the search module includes a keyword search capability, a hierarchical search capability, a dichotomous key search capability, and a parametric search capability (element 41a). Claims 2, 13, 24, and 35 of Application No. 09/799,032 are directed to “utilizing a selective one or more search methodologies including keyword search, hierarchical tree search, dichotomous key search, and parametric search.” Clearly, a search module including four search capabilities is different than utilizing a selective one or more search methodologies.

Further, present claim 41 includes “accessing one or more nodes within the directory tree structure and obtaining data from the one or more nodes by an external system utilizing an applications programming interface” (element 41f). No such limitation is claimed in Application No. 09/799,032. Similar argument applies to the present claims 45 and 47 (element 47c).

Still further, present claim 41 includes “displaying the collection of related data for a particular node in an encyclopedia-like format” (element 41g). No such limitation is claimed in Application No. 09/799,032. Similar argument applies to the present claims 46 and 49.

Therefore, the present claims 41 and 43-49 and the claims 1-4, 12-15, 23-25, and 34-37 within the Application No. 09/799,032 are not directed to the same invention.

#### **Rejections under 35 U.S.C. §102(e)**

Within the Office Action, claims 1-40 and 42 have been rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,253,188 issued to Witek et al. (hereafter “Witek”). The Applicant respectfully traverses this rejection.

Witek teaches a system and method for providing classified ads over the Internet. Internet users can connect to a Newspaper web server and central Web application server to search for and obtain classified ads. Ad records are stored in ad database servers 20 for providing classified ad records on request to application servers 16. To search the ad records, the search process is divided into two principle parts. The first part includes a system entry and pre-selection sequence, and the second part includes a record selection sequence (Witek, col. 12, lines 10-13). More specifically, in the first part the user enters the system and specifies the category of classified ads to be searched. Thereafter, as the user navigates to the respective selected category, the user further specifies a subcategory for the particular category selected (Witek, col. 12, lines 27-37). The selected category and subcategory pair is identified by a category/subcategory ID 46. The second part of the search process includes entering a formal record selection query containing the specific parameters for the ad records the user wishes to see. The specific parameters are entered as primary selection parameters 60 and as secondary selection parameters 62. In summary, the first part of the search process is limited to performing

searches based on category, or in other words a hierarchical search (Witek, col. 13, lines 30-46).

The second part of the search process is limited to performing searches based on entered parameters, in other words keyword search or parametric search. Witek does not teach performing a search in which for any given searching step, four different search methodologies are available to be used to perform the search. Specifically, Witek does not teach a search module that includes a keyword search capability, a hierarchical search capability, a dichotomous key search capability, and a parametric search capability such that each utilization of the search module includes the availability of each of these search capabilities.

By the above amendments, the independent claims have been amended to clarify that each utilization of the search module includes the ability to use each of the four search methodologies. Any of these four search methodologies can be used in any frequency to complete a research task, either independently or in any combination thereof.

Further, within the Office Action it is stated that Witek teaches a dichotomous key search. To support this assertion, Figure 3, element 70, and column 16, lines 27-50 are cited. The Applicant respectfully disagrees with this conclusion. Column 16, lines 27-50 of Witek refer to a mapped field 70 within the secondary selection parameters 62. Witek teaches that the mapped fields 70 are “yes-no” secondary features that provide details concerning the ad record subject matter. In particular, Witek teaches that the yes-no fields 70 provide up to 32 features which the user can simply check off in a selection menu (such as element 146 in Figure 10) to further describe the ad to be viewed. However, this is no different than a parametric search in which the parameters are limited to yes or no. Within the Office Action, it is stated that the present specification defines a “dichotomous key search” as the ability to instruct users through an answer and question dialog, often yes or no answers, and that Witek also gives the user the option of answering questions by checking the boxes in the selection menu. It is therefore concluded within the Office Action that these two search options are the same. The Applicant respectfully disagrees with the conclusion that the selection menu 146 including yes-no fields 70 of Witek is the same as a dichotomous key search as described in the present application.

On page 18, lines 6-10, the present specification defines a dichotomous key search as:

“A dichotomous key structure is a binary key structure or two-node tree. This structure is used as a decision tree mechanism to instruct users in deciphering information given in an answer or question dialog, often a yes or no answer. Examples of this include diagnosing a medical disease, diagnosing a mechanical problem, and working a system such as classifying a biological species by physical attributes.”

A decision tree mechanism is a mechanism for progressively moving down a directory tree structure. Movement down the directory tree structure is accomplished by making successive decisions related to posed questions, such as the above described answer or question dialog. This process is similar to that of successively selecting a category from a directory menu, and then selecting a subcategory from the selected category, and so on, to move down a hierarchical directory structure. However, the dichotomous key search differs from the category search, or hierarchical search, by structuring the progression down the directory tree structure in a binary manner. Where a category progression provides multiple options at any given selection opportunity, a dichotomous key progression is specifically configured to provide only two options at any given selection opportunity. Such a structure is represented as a “binary key structure” or a “two-node tree”.

The yes-no fields 70 of Witek are all selected as a single grouping, that is each yes-no field is considered a single parameter within a parametric search. The user selects all desired yes-no fields 70, and then, within a single search step, a search is performed using all selected yes-no fields 70 plus all other input parameters 68, 72 (Figure 3 of Witek), and 142 (Figure 10 of Witek). In contrast, a dichotomous key search, as applied to the present invention, is a succession of searching steps, where each search step divides the remaining database into two based on the user response to a single question. Each search step first requires a user response. The search is then performed, and another user response is then required before a successive search is performed (Specification, Figure 6; page 30, lines 5-24). An example is given on page 30, lines 1-4 of the present specification. In this example, one such use of a dichotomous key search is at the node for “fiction”, the dichotomous key selections are “fiction books” and “fiction other than books”, or at the node for “Mercedes-Benz” and the dichotomous key selections are “Mercedes-Benz Dealers “ and “Mercedes-Benz Models”. On page 28, lines 16-20 of the present specification, a difference between conventional, or category-configured, directory structures and dichotomous key structures is given:

“In conventional directory structures, where there are multiple entries per node, users can easily become lost. As directories grow and become more complicated, decisions become more difficult and choosing between two paths associated with a dichotomous key structure verses many paths associated with directory structures is simpler. Therefore, the dichotomous tree structure improves ease of use for the user.”

As such, Witek does not teach a dichotomous key search.

Amended independent claim 1 is directed to a method of performing a research task within a searchable database. The method of claim 1 comprises the steps of utilizing a search module to correlate a search criteria to a searchable database for generating one or more matching items, wherein each matching item corresponds to a segment of the searchable database, further wherein the search module includes a keyword search capability, a hierarchical search capability, a dichotomous key search capability, and a parametric search capability, utilizing the search module to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, and further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, and repeating the step of utilizing the search module until the research task is completed such that each utilization of the search module includes the availability of the keyword search capability, the hierarchical search capability, the dichotomous key search capability, and the parametric search capability. As discussed above, Witek does not teach using a search module including four different types of search capabilities, where each utilization of the search module includes the availability of each of the four search capabilities. Further, Witek does not teach a search module that includes a dichotomous key search capability. For at least these reasons the independent claim 1 is allowable over the teachings of Witek.

Claims 2-13 depend on the independent claim 1. As described above, the independent claim 1 is allowable over the teachings of Witek. Accordingly, claims 2-13 are all also allowable as being dependent on an allowable base claim.

Amended independent claim 14 is directed to a research system for performing a research task within a searchable database. The research system of claim 14 comprises means for accessing the searchable database, and means for utilizing a search module coupled to the means for accessing to correlate a search criteria to the searchable database for generating one or more matching items, wherein each matching item corresponds to a segment of the searchable database, further wherein the search module includes a keyword search capability, a hierarchical search capability, a dichotomous key search capability, and a parametric search capability such that each utilization of the search module includes the availability of each search capability. As discussed above, Witek does not teach using a search module including four different types of search capabilities, where each utilization of the search module includes the availability of each of the four search capabilities. Further, Witek does not teach a search module that includes a dichotomous key search capability. For at least these reasons the independent claim 14 is allowable over the teachings of Witek.

Claims 15-26 depend on the independent claim 14. As described above, the independent claim 14 is allowable over the teachings of Witek. Accordingly, claims 15-26 are all also allowable as being dependent on an allowable base claim.

Amended independent claim 27 is directed to a research system for performing a research task within a searchable database. The research system of claim 27 comprises a research server configured to utilize a search module to correlate a search criteria to the searchable database coupled to the research server for generating one or more matching items, wherein each matching item corresponds to a segment of the searchable database, further wherein the search module includes a keyword search capability, a hierarchical search capability, a dichotomous key search capability, and a parametric search capability, to utilize the search module to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, and to repeat the utilization of the search module to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, until the research task is completed, and further wherein each utilization of the search module includes the availability of the keyword search capability, the hierarchical search capability, the dichotomous key search capability, and the parametric search capability. As discussed above, Witek does not teach using a search module including four different types of search capabilities, where each utilization of the search module includes the availability of each of the four search capabilities. Further, Witek does not teach a search module that includes a dichotomous key search capability. For at least these reasons the independent claim 27 is allowable over the teachings of Witek.

Claims 28-36 depend on the independent claim 27. As described above, the independent claim 27 is allowable over the teachings of Witek. Accordingly, claims 28-36 are all also allowable as being dependent on an allowable base claim.

Amended independent claim 37 is directed to a network of devices for performing a research task within a searchable database. The network of devices of claim 37 comprises one or more computer systems configured to communicate with other systems, and a research server configured to couple to the one or more computer systems to utilize a search module to correlate a search criteria to the searchable database coupled to the research server for generating one or

more matching items, wherein each matching item corresponds to a segment of the searchable database, further wherein the search module includes a keyword search capability, a hierarchical search capability, a dichotomous key search capability, and a parametric search capability, to utilize the search module to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, and to repeat the utilization of the search module to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, until the research task is completed, and further wherein each utilization of the search module includes the availability of the keyword search capability, the hierarchical search capability, the dichotomous key search capability, and the parametric search capability. As discussed above, Witek does not teach using a search module including four different types of search capabilities, where each utilization of the search module includes the availability of each of the four search capabilities. Further, Witek does not teach a search module that includes a dichotomous key search capability. For at least these reasons the independent claim 37 is allowable over the teachings of Witek.

Claims 38-40 depend on the independent claim 37. As described above, the independent claim 37 is allowable over the teachings of Witek. Accordingly, claims 38-40 are all also allowable as being dependent on an allowable base claim.

Amended independent claim 42 is directed to a method of performing a research task within a searchable database. The method of claim 42 comprises the steps of utilizing a search module to correlate a search criteria to the searchable database for generating one or more matching items, wherein each matching item corresponds to a segment of the searchable database, further wherein the search module includes a keyword search capability, a hierarchical search capability, a dichotomous key search capability, and a parametric search capability, utilizing the search module to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the segment of the searchable database, and further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, and further wherein each utilization of the search module includes the availability of the keyword search capability, the hierarchical search capability, the dichotomous key search capability, and the

parametric search capability, selecting one of the subsequent matching items, and displaying a collection of related data corresponding to the selected subsequent matching item into an encyclopedia-like format, wherein the encyclopedia-like format includes text, graphics, and links to related objects. As discussed above, Witek does not teach using a search module including four different types of search capabilities, where each utilization of the search module includes the availability of each of the four search capabilities. Further, Witek does not teach a search module that includes a dichotomous key search capability. For at least these reasons the independent claim 42 is allowable over the teachings of Witek.

### **Rejections under 35 U.S.C. §103(a)**

Within the Office Action, claims 41 and 43-49 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Witek in view of U.S. Patent No. 6,292,796 issued to Drucker et al. (hereafter "Drucker").

As discussed above, Witek does not teach using a search module including four different types of search capabilities, where each utilization of the search module includes the availability of each of the four search capabilities. Drucker teaches a keyword search methodology where the search results can be sent to a user using a conventional push technology. It is stated within the Office Action that Drucker is cited to apply the teaching of a notification system, since Witek does not disclose the method of setting a notification signal by saving a query string, and notifying a user of new data entered into the search databases. However, Drucker does not teach using a search module including four different types of search capabilities. Accordingly, neither Witek, Drucker nor their combination teach using a search module including four different types of search capabilities.

Amended independent claim 41 is directed to a method of performing a research task within a searchable database. The method of claim 41 comprises the steps of performing one or more searches by utilizing a search module, the search module including a keyword search capability, a hierarchical search capability, a dichotomous key search capability, and a parametric search capability such that each utilization of the search module includes the availability of each search capability, to correlate a search criteria to a searchable database for generating one or more matching items, wherein the searchable database is formatted in a directory tree structure and each matching item represents a node from within the directory tree structure, wherein the node is a collection of related data, and further wherein as each successive search is performed the generated matching items represent nodes which reside further down the directory tree structure than the node from which the successive search is performed, categorizing each item of



data by a navigation path through the directory tree structure and by one or more parameters which are specific to the node in which the data is included, accessing a specific node within the directory tree structure using a query string, wherein the query string defines the navigation path through the directory tree structure to access the specific node within the directory tree structure, accessing a discrete item of data using the query string and one or more set parameters and setting a notification signal by saving the query string and the one or more set parameters, notifying a user of new data entered into the searchable database in response to triggering of the notification signal, wherein triggering of the notification signal occurs when new data is entered into the searchable database and the navigation path and set parameters of the new data match the query string and set parameters saved according to the set notification signal, accessing one or more nodes within the directory tree structure and obtaining data from the one or more nodes by an external system utilizing an applications programming interface, wherein the applications programming interface accesses the one or more nodes within the directory tree structure using the query string, and displaying the collection of related data for a particular node in an encyclopedia-like format, wherein the encyclopedia-like format includes text, graphics, links to related topics within the directory tree structure, links to related web sites external to the directory tree structure, or any combination thereof. As discussed above, neither Witek, Drucker, nor their combination teach using a search module including four different types of search capabilities, where each utilization of the search module includes the availability of each of the four search capabilities. Further, neither Witek, Drucker nor their combination teach a search module that includes a dichotomous key search capability. For at least these reasons the independent claim 41 is allowable over the teachings of Witek, Drucker, and their combination.

Amended independent claim 43 is directed to a method of performing a research task within a searchable database. The method of claim 43 comprises the steps of performing one or more searches by utilizing a search module, the search module including a keyword search capability, a hierarchical search capability, a dichotomous key search capability, and a parametric search capability such that each utilization of the search module includes the availability of each search capability, to correlate a search criteria to the searchable database for generating one or more matching items, wherein the searchable database is formatted in a directory tree structure and each matching item represents a node from within the directory tree structure, wherein the node is a collection of related data, and further wherein as each successive search is performed the generated matching items represent nodes which reside further down the directory tree structure than the node from which the successive search is performed, categorizing each item of data by a navigation path through the directory tree structure and by one or more parameters

which are specific to the node in which the data is included, and accessing a specific node within the directory tree structure using a query string, wherein the query string defines the navigation path through the directory tree structure to access the specific node within the directory tree structure. As discussed above, neither Witek, Drucker, nor their combination teach using a search module including four different types of search capabilities, where each utilization of the search module includes the availability of each of the four search capabilities. Further, neither Witek, Drucker nor their combination teach a search module that includes a dichotomous key search capability. For at least these reasons the independent claim 43 is allowable over the teachings of Witek, Drucker, and their combination.

Claims 44-46 depend on the independent claim 43. As described above, the independent claim 43 is allowable over the teachings of Witek, Drucker, and their combination. Accordingly, claims 44-46 are all also allowable as being dependent on an allowable base claim.

Amended independent claim 47 is directed to a method of performing a research task within a searchable database. The method of claim 47 comprises the steps of, performing one or more searches by utilizing a search module, the search module including a keyword search capability, a hierarchical search capability, a dichotomous key search capability, and a parametric search capability such that each utilization of the search module includes the availability of each search capability, to correlate a search criteria to the searchable database for generating one or more matching items, wherein the searchable database is formatted in a directory tree structure and each matching item represents a node from within the directory tree structure, wherein the node is a collection of related data, and further wherein as each successive search is performed the generated matching items represent nodes which reside further down the directory tree structure than the node from which the successive search is performed, categorizing each item of data by a navigation path through the directory tree structure and by one or more parameters which are specific to the node in which the data is included, and accessing one or more nodes within the directory tree structure and obtaining data from the one or more nodes by an external system utilizing an applications programming interface, wherein the applications programming interface accesses the one or more nodes within the directory tree structure using a query string, wherein the query string defines the navigation path through the directory tree structure to access the specific node within the directory tree structure. As discussed above, neither Witek, Drucker, nor their combination teach using a search module including four different types of search capabilities, where each utilization of the search module includes the availability of each of the four search capabilities. Further, neither Witek, Drucker nor their combination teach a search

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Attorney Docket No: ITLV-00101

module that includes a dichotomous key search capability. For at least these reasons the independent claim 47 is allowable over the teachings of Witek, Drucker, and their combination.

Claims 48 and 49 depend on the independent claim 47. As described above, the independent claim 47 is allowable over the teachings of Witek, Drucker and their combination. Accordingly, claims 48 and 49 are all also allowable as being dependent on an allowable base claim.

For the reasons given above, Applicant respectfully submits that claims 1-49 are now in a condition for allowance, and allowance at an early date would be appreciated. Should the Examiner have any questions or comments, he/she is encouraged to call the undersigned attorney at (408) 530-9700.

Respectfully submitted,  
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CERTIFICATE OF MAILING (37 CFR § 1.8(a))

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